

REMARKS

This application has been carefully reviewed in light of the final Office Action dated September 29, 2008. Claims 1,2, 4 to 30 and 35 are pending in the application, of which Claims 1, 22, 24, 26, 28 and 30 are in independent form. Reconsideration and further examination are respectfully requested.

Applicants wish to thank the Examiner for the indication that Claims 10 to 18, 20 and 21 contain allowable subject matter, and were merely objected to for their dependence on a rejected base claim. Changes have been made to these claims for consistency with changes made to their respective base claims.

Claim 28 was objected to because of an informality. In view of the amendments to Claim 28, the objection is believed to be moot. Accordingly, reconsideration and withdrawal of the objection are respectfully requested.

Claims 1 to 9, 19 and 22 to 30 were rejected under 35 U.S.C. § 103(a) over U.S. Patent Application Publication No. 2006/0020586 (Prompt) in view of U.S. Patent Application Publication No. 2007/0156677 (Szabo). Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 1, 24 and 28

Claims 1, 24 and 28 define presentation of a data structure that comprises a plurality of data elements corresponding to compulsory entities and context entities of a data source. A representation of at least one data source is constructed, and at least one occurrence frequency of at least one data element is obtained from previous views of the at least one data source. At least one compulsory entity is identified in the representation, and

at least one context entity is determined in said representation and in context data. The determination is based on the at least one occurrence frequency. A data structure is presented, wherein the data structure is a subset of the data from the data source. The data structure comprises a plurality of data elements, and each data element corresponds to at least one of the at least one compulsory entity and the at least one context entity.

Applicants submit that the applied references, alone or in any permissible combination, are not seen to disclose or to suggest at least the notion of determining at least one context entity in a representation of a data source and in context data, wherein the determination is based on at least one occurrence frequency obtained from previous views of the data source, and presenting a data structure that includes at least one compulsory entity and determined context entities. More particularly, the applied references are not seen to disclose or to suggest at least (i) obtaining at least one occurrence frequency of at least one data element from previous views of at least one data source, and determining at least one context entity in a representation of the at least one data source and in context data, wherein the determination is based on the at least one occurrence frequency, and (ii) presenting a data structure, wherein the data structure is a subset of the data from the data source, comprising a plurality of data elements, wherein each data element corresponds to at least one of at least one compulsory entity and the at least one context entity.

Prompt is believed to disclose providing access to databases via directories and other hierarchical structures. A hierarchical/relational translation is provided which includes a virtual directory server for capturing information in the nature of a relational database schema and metadata. The captured schema and metadata are then translated into virtual directories. A virtual directory of information organizes an index of data records

and a standard addressing schema is provided to enable customizable access to relevant views of relational computing systems. Figure 9 of Prompt shows a graphical representation of a user interface for displaying directory view definitions.

However, Prompt is believed to be silent on determining at least one context entity in a representation of a data source and in context data, wherein the determination is based on at least one occurrence frequency obtained from previous views of the data source, and presenting a data structure that includes at least one compulsory entity and determined context entities.

Szabo is believed to disclose a human user computer interface system wherein a taxonomic context for an operation, such as a database search, is interactively defined. Specifically, at paragraph [0299], Szabo discloses that user queries are filtered by defining a user taxonomic hierarchy of interests, correlating the user taxonomic hierarchy with a set of references taxonomic hierarchies, and modifying the user taxonomic hierarchy based on sets of rules associated with reference taxonomic hierarchies having high correlations. Additionally, Szabo discloses that the search engine can return search results from a query to the user in the form of a tree object. The user may then use a tree object viewer to probe the tree object, without referencing the specific contents thereof, to determine the relevant portions thereof.

Szabo discloses that deep content may be made available within the tree. A commercial portion of the taxonomy could be identified by an outline, a special color, or other demarcation. Thus, for example, the user may write the sentence in a clue box, "I want to buy a Durango". In response, the user may then be presented with a series of zoomed in views of a taxonomic tree, one of which might show a node representing

“Durango” under an ancestor node labeled “Chrysler”. The user could go directly to a desired part of Chrysler’s web site without needing to navigate the Chrysler web site.

Thus, Szabo is believed to disclose a tree object that has nodes that represent resources, and that a user can select a node to retrieve the specific contents of the resource represented by the selected node.

However, Szabo is believed to be silent on determining at least one context entity in a representation of a data source and in context data, wherein the determination is based on at least one occurrence frequency obtained from previous views of the data source, and presenting a data structure that includes at least one compulsory entity and determined context entities.

Therefore, the applied references, alone or in any permissible combination, are not seen to disclose or to suggest at least the notion of determining at least one context entity in a representation of a data source and in context data, wherein the determination is based on at least one occurrence frequency obtained from previous views of the data source, and presenting a data structure that includes at least one compulsory entity and determined context entities. More particularly, the applied references are not seen to disclose or to suggest at least (i) obtaining at least one occurrence frequency of at least one data element from previous views of at least one data source, and determining at least one context entity in a representation of the at least one data source and in context data, wherein the determination is based on the at least one occurrence frequency, and (ii) presenting a data structure, wherein the data structure is a subset of the data from the data source, comprising a plurality of data elements, wherein each data element corresponds to at least one of at least one compulsory entity and the at least one context entity.

In view of the foregoing amendments and remarks, independent Claims 1, 24 and 28, as well as the claims dependent therefrom, are believed to recite subject matter that would not have been obvious from the applied references, and are therefore believed to be in condition for allowance.

Claims 22, 26 and 30

Claims 22, 26 and 30 define construction and presentation of data for a keyword searching operation in at least one data source involving at least one search keyword. A non-graphical representation of the at least one data source and a plurality of previous views of the at least one data source is constructed. At least one compulsory entity is identified in the non-graphical representation. The compulsory entity is a node in the non-graphical representation representing a location of the one or more at least one search keyword. At least one data structure comprising the at least one compulsory entity and one or more context entities corresponding to at least one search keyword is constructed. The context entities are obtained from the non-graphical representation using context data obtained from the plurality of previous views. The at least one data structure is presented as result of the keyword searching operation.

Applicants submit that the applied references, alone or in any permissible combination, are not seen to disclose or to suggest at least the notion of obtaining context entities corresponding to search keywords from a non-graphical representation of a data source using a plurality of previous views of the data source, and presenting a data structure that includes the context entities and at least one compulsory entity that corresponds to the search keyword. More particularly, the applied references are not seen to disclose or to

suggest at least (i) obtaining one or more context entities corresponding to at least one search keyword, wherein the at least one context entity is obtained from a non-graphical representation of at least one data source using context data obtained from a plurality of previous views of the at least one data source, and constructing at least one data structure comprising at least one compulsory entity in the non-graphical representation and the at least one context entity, and (ii) presenting the at least one data structure as a result of a keyword searching operation.

As described above, Prompt is believed to disclose providing access to databases via directories and other hierarchical structures. A hierarchical /relational translation is provided which includes a virtual directory server for capturing information in the nature of a relational database schema and metadata. The captured schema and metadata are then translated into virtual directories. A virtual directory of information organizes an index of data records and a standard addressing schema is provided to enable customizable access to relevant views of relational computing systems. Figure 9 of Prompt shows a graphical representation of a user interface for displaying directory view definitions.

On the other hand, Claims 22, 26 and 30 define obtaining context entities corresponding to search keywords from a non-graphical representation of a data source using a plurality of previous views of the data source, and presenting a data structure that includes the context entities and at least one compulsory entity that corresponds to the search keyword.

In contrast, while Prompt may be seen by some to disclose a graphical representation of a user interface for displaying directory view definitions, Prompt is

believed to be silent on the use of a non-graphical representation of a data source to obtain context entities corresponding to search keywords using a plurality of previous views of the data source, and presenting a data structure that includes the context entities and at least one compulsory entity that corresponds to the search keyword.

Szabo has been studied, but it is not seen to teach anything that, when combined with Prompt, would overcome the deficiencies of Prompt as described above.

Therefore, the applied references, alone or in any permissible combination, are not seen to disclose or to suggest at least the notion of obtaining context entities corresponding to search keywords from a non-graphical representation of a data source using a plurality of previous views of the data source, and presenting a data structure that includes the context entities and at least one compulsory entity that corresponds to the search keyword. More particularly, the applied references are not seen to disclose or to suggest at least (i) obtaining one or more context entities corresponding to at least one search keyword, wherein the at least one context entity is obtained from a non-graphical representation of at least one data source using context data obtained from a plurality of previous views of the at least one data source, and constructing at least one data structure comprising at least one compulsory entity in the non-graphical representation and the at least one context entity, and (ii) presenting the at least one data structure as a result of a keyword searching operation.

In view of the foregoing amendments and remarks, independent Claims 22, 26 and 30, as well as the claims dependent therefrom, are believed to recite subject matter that would not have been obvious from the applied references, and are therefore believed to be in condition for allowance.

CONCLUSION

No other matters being raised, it is believed that the entire application is fully in condition for allowance, and such action is courteously solicited.

No claim fees are believed due. However, should it be determined that additional claim fees are required under 37 C.F.R. 1.16 or 1.17, the Director is hereby authorized to charge such fees to Deposit Account 06-1205.

Applicants' undersigned attorney may be reached in our Costa Mesa, California office at (714) 540-8700. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

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